The State of Iowa's Revised Affirmative Action Program

Introduction

In the fall of 1997, Professor Russell Lovell of the Drake University Law School reviewed the Iowa Department of Personnel's affirmative action plan (AAP) at the request of The Department and the Staffing Facet Team. The commission of Lovell was prompted by the currently vague judicial conditions that affect the operation of most AAPs. His resulting review focused on whether The State of Iowa's AAP was in compliance with current case law. Russell Lovell's credentials and report can be found in APPENDIX A. The scope of the review encompassed those executive branch agencies falling under the jurisdiction of IDOP's AAP.

IDOP was given the responsibility of coordinating the State's affirmative action plan in July of 1986. Before that date control of Iowa's AAP was maintained by the Department of Civil Rights. The design of IDOP's endeavored to base its AAP and the resulting voluntary affirmative action goals on an identified statistical disparity between the composition of the work force and the relevant labor force. Work force data in IDOP's system was determined by payroll information using occupied positions on the date of calculation. Labor force data in IDOP's system was derived from relevant census information for occupational categories.   It was decided by IDOP in 1986 that any affirmative action program must be very specific in identifying problems and appropriate remedies. It was also decided that any remedy proposed could not completely exclude any protected group. Lastly, it was resolved that affirmative action remedies be temporary in nature.

I.   Professor Lovell's Conclusions Regarding the State's Previous AAP

Lovell concluded that the general framework for the State's AAP was sound and was based on a good faith effort to follow past case law available when IDOP's AAP was initiated. Lovell went on to say that the affirmative action efforts of the State appear to be representative of most voluntary affirmative action programs, utilizing both valid nonpreferential and preferential components. He found that the preferential component of Iowa's affirmative action effort is limited to those job categories in which there are statistical calculations demonstrating underutilization and to employment decisions involving hiring and promotions only in those categories. This finding of the State's reliance on the remedial justification, supported by statistical calculations of underutilization, clearly distinguishes Iowa's AAP from those found wanting in recent court cases. It was also found that IDOP is much more sophisticated in its calculation of underutilization than were past defendants in affirmative action cases.

II.   Concerns and Recommendations of Professor Lovell

Professor Lovell voiced four main concerns:

- Threshold Calculation Methodology
- Annual Calculation Methodology
- Aggregation of Minorities
- End Date of IDOP's AAP

Lovell's first concern was that IDOP based its 1986 threshold underutilization calculations on a methodology approved by the Office of Federal Contract Compliance Programs (OFCCP), but this methodology, the "one person" standard (discussed in more detail in section V), is more lenient than permitted by either Title VII or the equal protection clause. Using the "one person" method to calculate both the threshold underutilization in executive branch agencies and their annual underutilization may have generated results showing underutilization which may not have been as substantial as the manifest imbalance standard requires. ***In other words, the threshold underutilization calculations of 1986, along with the yearly use of the "one person" methodology used to determine annual underutilization in the past may have possibly combined in an overly zealous affirmative action program which may have found underutilization where, in fact, there was none by today's standards***. Lovell's recommendation was to immediately recalculate the 1986 threshold underutilization for the State's work force using the binomial method (described in further detail in Section VI) and then construct preferential mechanisms for correcting underutilization that are narrowly tailored to the specific area of underutilization.

A second concern voiced by Professor Lovell was with regard to IDOP's annual calculation of underutilization to determine whether each occupational class code (OCC) category has achieved balance or is underutilized within the departments. IDOP had used a modified "one person" standard for annual reviews where .50 or more of a person was used to determine underutilization this policy continued to subject OCC job categories with slight underutilization to the full preferential affirmative action effort. Although this practice was changed to a traditional "one person" standard in 1997, Lovell still recommended a further change to these annual calculations, that being that underutilization be determined at the EEO-4 category level instead of OCC category, in certain situations, to retain flexibility and meaningful findings.

Professor Lovell's third concern dealt with the Iowa Department of Personnel's practice of aggregating all minorities together when determining underutilization and when making hiring decisions. Lovell recommended that the underutilization calculations be redone based on the individual racial and ethnic groupings within the state. Lovell conceded, however, that aggregation of minorities might be necessary in a state like Iowa where minority groups, individually, represent such a small percentage of the population. By making the effort of recalculation using the individual groups, the State will be better positioned to determine the feasibility and dilutive impact of Lovell's recommendation on affirmative action efforts for minorities within the State.

Lastly, Professor Lovell was concerned with the fact that the State does not specifically declare that preferential affirmative action concludes upon achieving balance within an OCC category and it was unclear whether in practice it ends at that point. At this point Lovell recommended that balance be defined and an end date be set. According to Professor Lovell this would not preclude IDOP from monitoring job categories and setting nonpreferential goals. However, it would prevent IDOP from setting preferential goals after achieving balance and subjecting departments to Hiring Decision Justification Reviews. This would be true even if the job category were to slip back into an underutilized status (page 26 of Lovell's report).

III.   Underutilization Defined

Underutilization is defined as a condition that exists when there are fewer minorities, women or persons with disabilities in a particular job category than would be reasonably expected by their availability in the relevant qualified labor force. The State's affirmative action plan explains the methodology of its underutilization calculation as follows:

> A key element of the planning and reporting process involves the
> comparison of the composition of the work force to the availability
> of females, minorities and persons with disabilities within the relevant
> labor market pool. Where representation of specific groups in the
> work force is below the percentages of those groups present in the
> relevant labor market pool, the work force is considered underutilized.

As noted in the **Weber-Johnson** (United Steelworkers of Am. v. Weber, 443 U.S. 193 (1979) and the Johnson. v. Transp. Agency, Santa Clara County, 480 U.S. 616, 107 S. Ct.1442 (1987)) cases, which reviewed the Title VII standard for voluntary affirmative action in employment, before an employer can engage in preferential affirmative action based on a remedial justification, the employer must demonstrate that there is a "conspicuous manifest imbalance in a traditionally segregated" job category. The case law continues to be ambiguous with regard to the extent of a statistical showing of underutilization necessary to justify preferential affirmative action and has not defined "conspicuous manifest imbalance in a traditionally segregated" job category. The indistinct nature of the current case law is one of the main reasons Lovell recommended a recalculation of the threshold underutilization in 1986. In his estimation, this recalculation would support a decision of manifest imbalance when a job category was found to be underutilized in 1986, the year in which the current AAP went into effect.

IV.   Clarification of Affirmative Action

Affirmative action is a federally supported process whereby actions are taken to neutralize the effects of past discriminatory practices that violate Title VII and other equal employment laws. The United States government requires that companies engaged in large federal contracts and/or subcontracts must agree to do more than observe EEO laws. These additional efforts are formally specified in affirmative action plans and are audited periodically by the OFCCP. The Iowa Department of Personnel however, is not covered by the OFCCP, but rather, by Title VII of the Civil Rights Act of 1964 and Chapter 19B of the Iowa State constitution.

Executive Order 11246, issued by President Johnson in 1965, requires contracting companies to take positive steps (affirmative action) toward eliminating the present and future effects of past discrimination against females and minorities. Contractors must have written plans on file at each facility detailing the facility's current representation of minorities and females at each level and projecting goals and timetables for change wherever those levels are considered too low.

The basic idea of affirmative action was simple: motivate firms to carry on continuous, conscious appraisal of their procedures and rules to detect and eliminate those that excluded minorities and women without appropriate justification. The mechanism to embody this idea was the ubiquitous affirmative action plan, imposed

on all federal contractors by Executive Order 11246. Make a plan, the government told firms in 1972, that includes these steps:

> *Step 1.*   *Take action to make sure your selection pool is expansive*
> *Step 2.*   *Given the racial composition of the expanded pool, predict*
> *the results over time of your selecting nondiscriminatorily*
> *from it. Your prediction constitutes your affirmative action*
> *"goals". They give you a benchmark against which to*
> *compare actual outcomes.*
> *Step 3.*   *At intervals, compare your actual selections with your*
> *"goals". If your are not meeting your goals, then reexamine*
> *your rules and procedures to see what is causing the problem.*

NOTE. An Executive Order, by definition is temporary. Affirmative Action was not to be a permanent process. This is why it would behoove IDOP to define when a job category is balanced and to set an end date.

The State of Iowa passed Chapter 19B Equal Opportunity and Affirmative Action in 1986 in order to strengthen its commitment to, and its administrative handling of, affirmative action. Chapter 19B requires state government to apply affirmative action in personnel management functions.

> 19B.1   "**Affirmative Action**" means action appropriate to overcome the
> effects of past or present practices, policies, or other barriers to equal
> employment opportunity.

> 19B.2   **Equal Opportunity in State Employment-Affirmative Action**
> It is the policy of this state to provide equal opportunity in state employment
> to all persons. An individual shall not be denied equal access to state
> employment opportunities because of race, creed color, religion, national
> origin, gender, age, or physical or mental ability. It also is the policy of this
> state to apply affirmative action measures to correct deficiencies in the state
> employment system where those remedies are appropriate. This policy
> shall be construed broadly to effectuate its purpose.

Chapter 20 (19B) of the Iowa Department of Personnel's administrative rules was adopted to carry out Chapter 19B. These rules define the components of an affirmative action plan that apply to all departments.

Affirmative Action can be categorized into either preferential affirmative action or nonpreferential affirmative action. Nonpreferential affirmative action has been defined as
"a color conscious, self-monitoring device to aid firms and institutions in achieving nondiscrimination." Nonpreferential affirmative action includes efforts to ensure that recruiting reaches members of protected groups. This is a race or gender conscious effort to target individuals from groups which may have been discouraged, for a variety of reasons, from applying for a given job in the past.

Preferential affirmative action includes weighing minority racial status or female gender as a plus-factor in employment decisions such as hiring or mandating that a certain number of hires be

qualified members of protected classes. Preferential actions require that numerical hiring goals be set when it is found that there is a manifest imbalance in underutilization for a given job category and that justification by the hiring agency be given when a qualified minority or female applicant is not chosen for a given underutilized position. Both affirmative action activities will be prescribed in the recalculated Iowa AAP where appropriate.

V.   The "One Person" Standard Defined

It was mentioned previously that in the past IDOP has used a "one person" or "any short fall" standard for calculating underutilization of protected classes, both at threshold and annually. This standard, and its use, has been authorized by the OFCCP. The method finds underutilization when there is "a shortfall of one or more minorities or females in a job group." Underutilization using this method is determined by:

- Multiplying estimated availability (expressed as a percentage) by the total number of employees in the job group to determine a number that equals the number of women and minorities who would be in the job group if it were (or is) "fully utilized".
- Subtracting the number of women and minorities currently in the job group from the 'fully utilized' number.
- Declaring underutilization only if the number of women or minorities is less than full utilization or balance by one whole person or more.

For example, if a group of 100 persons has 15 females and the availability for females is 19%, then the shortfall equals 4 persons $\{[(100 \times .19)-15]=4\}$. In this example, the job category would be underutilized by 4 people. Lovell believes this method is appropriate for annual underutilization calculations and balance determinations. However, This method is not statistically powerful enough for determining a manifest imbalance at a threshold point where, if found, preferential goals would be set.

VI.   The "Two Standard Deviation" or Binomial Distribution Method

This method indicates an underutilization in any group in which the difference between the expected number of minorities or females and the actual number is greater than two standard deviations. This method was approved by the Supreme Court in Hazelwood
[Hazelwood School Dist. v. United States, 299 (1977)] in the Title VII context, and in Croson [City of Richmond v. J.A.. Croson Co., 488 U.S. 469 (1989)] in the equal protection context. The binomial distribution method can be described in the following manner:

In this method the standard deviation is used as the determining factor in whether there is underutilization within a given job category or not. A standard deviation is a statistic which, when calculated, can be used to describe the spread of scores or data points within a sample when compared to the mean or average score. Therefore, if the actual utilization of women or minorities is two standard deviations from the expected utilization (0), the probability that the difference occurred for some reason other than chance is approximately 97.5% based on the nature and assumptions underlying the standard deviation statistic. Thus the job group is said to be

underutilized. For future reference, the probability that underutilization occurred for some reason other than chance is approximately 85% when shown by one standard deviation from the mean (0). This point will become more important in the following sections.

The OFCCP has authorized the use of this method when the subject job group (that is the total number of positions in a job category) satisfies a statistical test called The Rule of Nines. This test is used as a way to check whether the group size is sufficiently large enough to produce a statistically significant result that is reliable and valid. More will be said about this test and the binomial calculation in the Methods section (Section VIII).

VII.   Procedures and Data Used

Lovell's concerns and recommendations, clarity of results and data, along with ease in implementation for state departments, were of the highest priority to IDOP when constructing the new AAP. This priority guided IDOP throughout the following steps and procedures.

Data utilized in recalculating the 1986 threshold underutilization:

- 1986 Workforce Composition Analysis data (statewide information)
- 1985 Workforce data for the DOT (unavailable for 1986)
- 1986 Workforce data for all executive branch depts. minus the DOT
- 1989 Employment data (Workforce data)
- 1980 Census data
- 1990 Census data

VIII. Method

DOT Binomial Calculations

The first step the IDOP took after receiving Professor Lovell's report was to conduct a preliminary subset of calculations involving a rather large department – the Department of Transportation (DOT). The DOT was chosen because it was believed that this department, because of its size, would show the practicality of using the Binomial Distribution Method in conjunction with the Rule of Nines criterion. When using this method, it is of utmost importance that the sample group be large enough to meet the Rule of Nines for statistically meaningful results to be presupposed.

NOTE. The reason for this has to do with the underlying assumption of the Binomial Distribution Method. This method assumes a normal distribution (or bell curve) of scores. If the sample is too small, shown by a failure to meet the Rule of Nines, it cannot be assumed that the scores are normally distributed (they could be skewed, bimodal, or irregular). Therefore, any statistic calculated using the binomial method when the Rule of Nines is not met is not meaningful because the method assumes conditions that have not been substantiated. Any conclusions or decisions based on statistics derived in a situation such as this would most likely be incorrect, unreliable and invalid.

IDOP staff conducted these initial underutilization calculations. The process involved going back to 1989 employment data for the DOT (there were no 1986 employment data available at this point), and harvesting this information from microfiche. The data generated contained availability percentages for females and minorities based on the 1980 Census and the number of full-time positions within a job class and occupational code inside affirmative action reporting units (AARU) under EEO-4 categories headings. These data were inserted into a binomial spreadsheet program to calculate underutilization in the DOT for females and minorities in both job classes and occupational codes. The binomial spreadsheet program was provided to IDOP by Lovell, and the formula used in the program is as follows:

$$Z = O - NP/[\text{ SQR ROOT of } (N*P*Q)]$$

Where Z is a standard deviation reflecting underutilization when it is –2.00 or less.
N = The total number of occupied state jobs in 1989 in job class X or occupational
   code Y within a given AARU.
O = The number of minorities or females in the above category (N).
P = The availability percentages of minorities and females for the above category
   based on the 1980 Census.
Q = 1-P
   *The binomial program requires the user to input N, O, and P

The program performs another calculation at the same time. This is the Rule of Nines calculation and, as mentioned above, it is the criterion used to test whether a sample is large enough to produce and support meaningful and statistically valid results and conclusions. The calculation is as follows:

$$(1-P) * N = X \qquad \text{If X>9 than the sample meets the Rule of Nines criterion.}$$

NOTE. Z being called a standard deviation requires some supplemental information. In actuality, a standard deviation is dependent on the mean and the data because, as mentioned before, it describes the spread of scores. The standard deviation can be calculated by the square root of $N*P*Q$ alone. The equation used transforms the data to a standardized form where the mean is zero and the standard deviation is one. This transformation is necessary if standard deviations will be compared against other standard deviations across jobs with different data. For example, in a large set of data points, one standard deviation could cover 15 data points from the mean, whereas in a smaller set, one standard deviation could cover five or even one data point from the mean. A comparison of these two example standard deviations would mean little since there is no common basis for comparison. When the data is standardized into Z scores, a standard deviation in one set of scores is the same as in another.

Findings

In this original analysis, many job categories and occupational categories were found to be "underutilized" within AARUs under EEO-4 categories 1,2,3,6,7 and 8. However, only one occupational category under EEO-4 category 3 in the Motor Vehicle Division of the DOT met the Rule of Nines criterion. This meant that, of the 900 calculations completed for job classes across a subsection of the DOT, none met the Rule of Nines and only one of the 346 OCCs met the criteria.

It would, therefore, be contrary to case law to base preferential affirmative action goals on underutilization found at this level.

Decisions Based on DOT Findings

IDOP made a number of decisions based on this initial set of calculations. They are:

1. The sizes of minority groups in these calculations were too small to meet the Rule of Nines criterion for job classes and occupational categories even when aggregated. Breaking the minorities out into separate ethnic groups as Lovell recommended was not feasible at this particular level.

2. Using AARUs fragmented information so that the Rule of Nines was never met and in some areas were meaningless. For example, AARU – 342 (DOT Air Transit) under EEO category one was made up of two people. It was decided, therefore, that calculations would be based on a department-wide basis from this point on.

3. Lovell recommended that underutilization be determined at the OCC level or EEO-4 category level. These calculations fortified the practicality of this recommendation since IDOP did not find one job class in 900 assessed within the DOT that was large enough to meet the Rule of Nines criterion.

4. The DOT calculations were done using 1989 employment data. Because IDOP found job class and occupational category calculations to be meaningless, IDOP chose to use 1986 employment data as Lovell recommended for the next set of calculations. 1989 data were used initially because it was the only data set available that broke departments all the way down to job classes. The 1986 employment data were limited to department EEO-4 category breakdowns.

1986 Binomial Calculations for EEO-4 Categories Within State Departments

The next step the IDOP initiated after receiving Professor Lovell's report and conducting preliminary calculations of underutilization in the DOT, was to calculate the amount of underutilization in aggregated EEO-4 categories within each state department, as well as the departments as a whole.

IDOP staff also conducted these underutilization calculations. The process involved going back to 1986 employment data for all twenty-six (Department of Corrections and Department of the Blind were done separately later in the process) executive branch departments and gathering this information from microfiche. The data generated contained state availability percentages for females and minorities within the eight EEO-4 categories based on the 1980 Census, and number of positions in the EEO-4 categories within state departments, as well as number of minorities and females in the above positions. These data were inserted into a binomial spreadsheet program to calculate underutilization in the executive branch departments for females and minorities in both departmental EEO-4 categories and individual departments as a whole. The binomial spreadsheet program was given to IDOP by Lovell and the formula used in the program is as follows:

$$Z = O - NP / [\text{SQR ROOT of } (N*P*Q)]$$

Where Z is a standard deviation reflecting underutilization when it is –2.00 or less.
N= The total number of occupied state jobs in 1986 in EEO-4 category X within
Department Y, or Department Y as a whole.
O = The number of minorities or females in the above category (N).
P = The availability percentages of minorities and females for the above category
based on the 1980 Census.
Q = 1-P
*The binomial program requires the user to input N, O, and P

The program performs another calculation at the same time. This is the Rule of Nines calculation and, as mentioned above, it is the criterion used to test whether a sample is large enough to produce and support meaningful and statistically valid results and conclusions. The calculation goes as follows:

$$(1\text{-}P) * N = X \qquad \text{If X>9 than the sample meets the Rule of Nines criterion.}$$

Findings

In this second analysis many departmental EEO-4 categories and departments were found to be "underutilized." However, of the 224 EEO-4 calculations performed for female underutilization, only 52 calculations met the Rule of Nines (23%), and of the 224 EEO-4 calculations performed for minority underutilization, only 12 calculations met the Rule of Nines (5%). These findings translated to only 14% of the EEO-4 category calculations meeting the Rule of Nines criterion. The overall department calculations were somewhat better in that 71% of the female binomial calculations met the Rule of Nines and 32% of the minority binomial calculations met the Rule of Nines. It was concluded that it would often be incorrect to only base preferential affirmative action goals on underutilization found at the departmental EEO-4 category level. A more detailed synopsis of the findings can be found in APPENDIX B.

Decisions Based on Departmental EEO-4 Category Calculations

IDOP made a number of decisions based on this second set of calculations. They are:

1. Again the sizes of minority groups in these calculations were often too small to meet the Rule of Nines criterion within department EEO-4 categories even when aggregated. Therefore IDOP decided that breaking the minorities out into separate groups was not feasible at this particular level.

2. Lovell recommended that underutilization be determined at the OCC level or EEO-4 category level. These calculations fortified the practicality of this recommendation, since IDOP found that many more calculations met the Rule of Nines criterion in this stage of analyses.

3. Because it was becoming increasingly clear that the threshold underutilization calculations would be conducted in broader categories, IDOP began to question if two standard deviations might be more than what was needed to show threshold underutilization. Since aggregations of

dissimilar occupational categories and job classes would need to be grouped into departmental EEO-4 categories to get the proper sample size (to meet the Rule of Nines criterion), it was decided that the cutoff for threshold underutilization should be set at one standard deviation. There were two reasons for this decision:

- First, it was believed that aggregating dissimilar job classifications might act to mask underutilization within differing categories, i.e., a large group that is balanced when added to a small group that is underutilized may act to mask or cover the underutilization in the smaller group when aggregated.

- Second, it was believed that the State of Iowa, because of its work force, did not need to use such a large distance from the mean to assume underutilization. IDOP also felt justified in this decision since Lovell had stated on numerous occasions that two standard deviations was not necessarily the only cutoff that could be used, and in fact, one standard deviation was most likely appropriate to show a manifest imbalance in the threshold underutilization calculations.

4. Lastly, IDOP decided that threshold underutilization calculations would have to be conducted at the EEO-4 category level statewide and not just within departments. It was believed to be a necessary step in proving a manifest imbalance in some areas of the Iowa work force in 1986. This would also be an important step, in that, up to this point the calculations performed by IDOP on more specific levels were not meeting the Rule of Nines criterion. These calculations were performed because Professor Lovell advised IDOP that threshold underutilization could be calculated very broadly; it was the correction (preferential goals) that had to be narrowly tailored.

1986 EEO-4 Categories Statewide

Next, IDOP initiated a new set of calculations aimed at determining underutilization in EEO-4 categories on a statewide basis. This step came after receiving Lovell's report and conducting preliminary calculations of underutilization in the DOT and calculations of underutilization in aggregated EEO-4 categories within other state departments, as well as those departments as a whole. This phase was necessary due to the limited amount of calculations that had met the Rule of Nines criterion in the above analyses.

IDOP staff also conducted these underutilization calculations. The process involved going back to the 1986 Work Force Composition Analysis data for the eight EEO-4 categories, statewide, and gathering this information. The data contained state availability percentages for females and minorities within the eight EEO-4 categories based on the 1980 Census and the number of positions in the EEO-4 categories within the State, as well as, the number of minorities and females in the above positions. These data were inserted into a binomial spreadsheet program to calculate underutilization for females and minorities in EEO-4 categories statewide. The binomial spreadsheet program was given to IDOP by Lovell and the formula used in the program is as follows:

$$Z = O\text{-}NP/[\text{SQR ROOT of } (N*P*Q)]$$

Where Z is a standard deviation reflecting underutilization when it is –1.00 or less.
N = The total number of occupied state jobs in 1986 in EEO-4 category X.
O = The number of minorities or females in the above category (N).
P = The availability percentages of minorities and females for the above category
    based on the 1980 census.
Q = 1-P
    *The binomial program requires the user to input N, O, and P

The program performs another calculation at the same time. This is the Rule of Nines calculation and, as mentioned above, it is the criterion used to test whether a sample is large enough to produce and support meaningful and statistically valid results and conclusions. The calculation goes as follows:

$(1-P) * N = X$ If X>9 than the sample meets the Rule of Nines criterion.

Findings

In this third analysis, many EEO-4 categories were underutilized. More importantly, all EEO-4 categories for both minorities and females met the Rule of Nines. In conjunction with this third analysis, a fourth analysis was conducted based on a recommendation of Lovell. The recommendation was that IDOP should do this analysis again, but with "averaged" availability percentages. The reasoning for this recommendation was logical. The threshold underutilization calculation was being done for 1986, thus, the 1980 Census data were underestimating the population at 1986 (which was probably closer to 1990 Census percentages). So, availability percentages for females and aggregated minorities were weighted between 1980 percentages and 1990 percentages at a one-third / two-third split because calculations addressed a time span including 1986 to the present (4 years in 1980, 8 years in 1990).

In the first set of calculations, using only 1980 availibilities, EEO-4 categories 3, 4, 5, and 7, for minorities, were underutilized (Z<-1.00 standard deviation), and as mentioned above, all calculations met the Rule of Nines criterion. EEO-4 categories 1, 2, 3, 4, 5, and 8 were underutilized in the female calculations. In the second set of calculations, using the 1980/1990 "averaged" availability percentages, the magnitudes of underutilzation changed throughout, however, only EEO-4 category 8 for minorities went from balanced to underutilized. It was concluded that it would be proper to base preferential affirmative action goals on underutilization found at the departmental EEO-4 category level when appropriate and at the statewide EEO-4 categories. The data used and the calculations derived from these data can be found in APPENDIX C.

Decisions Based on Statewide EEO-4 Category Calculations

IDOP made a number of decisions based on this set of calculations. They are:

1. The sizes of individual minority groups in these calculations were too small to meet the Rule of Nines criterion for statewide EEO-4 categories, due to the minute availability percentages. Therefore IDOP decided that splitting the minorities out into separate ethnic groups was not feasible at any level and aggregating the minority groups would be done instead for all affirmative action decisions.

2. Lovell recommended that underutilization be determined at the OCC level or EEO-4 category level. These calculations fortified the practicality of this recommendation since IDOP found that many more calculations met the Rule of Nines criterion in this round of analyses. IDOP decided at this point that underutilzation would be calculated at statewide and departmental EEO-4 categories.   Preferential goals would come from these broad calculations, and corrections would be recommended to the departments at the more narrowly focused, underutilized, OCCS based on a yearly "one person" standard (more will be said on this decision later).

3. Aggregations of occupational categories and job classes would need to be grouped into departmental and statewide EEO-4 categories to get the proper sample size (to meet the Rule of Nines criterion). It was decided by IDOP that the cutoff for threshold underutilization should be set at one standard deviation. There were two reasons for this decision:

    *   First, it was believed that aggregating dissimilar job classifications might act to mask underutilization within differing categories. That is to say a large group that is balanced when added to a small group that is underutilized may act to mask or cover the underutilization in the smaller group when aggregated.

    *   Second, it was believed that the State of Iowa, because of its work force size, did not need to use such a large distance from the mean to assume underutilization. IDOP also felt justified in this decision since Lovell had stated on numerous occasions that two standard deviations was not necessarily the only cutoff that could be used, and in fact, one standard deviation was most likely appropriate to show a manifest imbalance in the threshold underutilization calculations.

4. AARU's and job classes will no longer have numerical goals or even be used in the final calculations. Because AARU's will no longer be used, the departments as wholes will need to take ownership of their affirmative action activities.

5. It was concluded that it would be proper to base preferential affirmative action goals on underutilization found at the departmental EEO-4 category level when appropriate and at the statewide EEO-4 categories in all other instances. To clarify, it was decided that any department that showed underutilization at the EEO-4 category and met the Rule of Nines criterion would be given preferential goals. However, not all departmental EEO-4 categories met the Rule of Nines. In these instances, where a departmental EEO-4 category is found to be underutilized, yet has not meet the Rule of Nines criterion, preferential goals will still be prescribed if there is just cause which will be determined by statewide underutilization of the EEO-4 category.

6. IDOP decided that nonpreferential activities, such as targeted recruitment, will be encouraged within departments (an extensive list of nonpreferential activities can be found in APPENDIX D. This will be a high priority in conjunction with the implementation of the new preferential goals determined by the threshold underutilization calculations. The revised HDJ process discussed later in Section IX will also be used to stress the importance of nonpreferential activities.

IX. Preferential and Nonpreferential Goals Based on Underutilization Calculations

The State of Iowa's new affirmative action plan will generate goals based on the following procedures.

- First, a "one person" calculation will be conducted for each OCC in every department. Then, these OCCs will be aggregated to their respective EEO-4 categories within departments. These calculations will be no different than in past years.

- If, after aggregating the occupational classes, a departmental EEO-4 category is found to be underutilized, the occupational classes within that category that contribute to the underutilization for females, minorities, or both will also be identified as underutilized for that department. Underutilization here refers to the "one person" standard.

- At this point, the type of affirmative action goal must be defined. If the threshold underutilzation calculation for an EEO-4 category, at the department or statewide level, was found to be underutilized in 1986, then preferential goals will be set at the departmental EEO-4 category level with corrections to be focused at the occupational class level for any class with one person or more underutilization. If, however, the threshold calculation was greater than −1.00 standard deviations, no preferential goals will be set. Nonpreferential goals will, however, be recommended for any EEO-4 category or OCC meeting the "one person" standard for underutilization, and departments will be encouraged to implement those types of activities.

NOTE. In the above text discussing underutilization, there was a distinction made between threshold underutilization and one person underutilization. The reader should recall that threshold underutilization was calculated using the Binomial Distribution Method, where underutilization is defined as −1.00 standard deviation or less. This underutilization determination is necessary to support preferential goal setting since 1986 and was recommended by Lovell. The "one person" standard definition is based on a calculation whereby any job category under-represented by one whole person or more is defined as underutilized. This underutilization determination is used on a yearly basis to track affirmative action progress. In effect, there will be very little change to the current system other than the comparison of yearly underutilization to the threshold underutlization, deletion of AARUs, changes in the HDJ process, and goals being set at EEO-4 categories with corrections at the OCC level instead of at the job class level.

The benefit of setting goals at the EEO-4 category is that corrections at the OCC level will allow departments greater flexibility in addressing their underutilization problems. In the past, when

corrections were made at the job class level, areas of appropriate correction were very constricted. This meant that limited correction opportunities were available, since vacancies in a limited number of classes had to be open to set goals.

Preferential goals in the new Iowa Affirmative Action Plan will not be based solely on vacancy forecasts. Instead, goals will be set by IDOP. These goals will be based on the one person calculation totals for EEO-4 categories, and dividing those totals by a number determined by IDOP. The divisor will be based on turnover and hiring trends of departments in the past. For example, in Department X there is underutilization of 10 females in EEO category 1. Based on turnover and hiring trends in the past thirty months, IDOP determines Department X will hire approximately four people a year for EEO category 1. Since female availability percentages in this category are 50% (hypothetical percentage for this example) it would be reasonable to set the hiring goal at two females per year for five years.

Goals shall not be rigid and inflexible quotas. They must be targets reasonably attainable through good faith efforts and must not cause any group of applicants to be excluded from the hiring process. Because of this, IDOP recognizes that the goals set by this process may overestimate hiring probabilities for departments and to make sure the goals do not become quotas they will be subject to adjustment based on hiring fluctuations or changes not accounted for by the hiring and turnover trends. The benefit of setting goals in this fashion is that a true end date for preferential goals can be set and striven for by departments.

Monitoring Affirmative Action Goals

In the past, when departments had an opportunity to fill vacancies, they were notified if the position being filled was an underutilized job class. Prior to making an offer of employment to a nonprotected class applicant for an underutilized job class, departments had to complete a Hiring Decision Justification form (HDJ) in which rationale was to be provided to IDOP for choosing not to take advantage of the opportunity to make an affirmative action hire. IDOP's Affirmative Action Program Manager then reviewed these HDJs and the hire could be reversed if the action of the department was inconsistent with the State's equal opportunity and affirmative action policies.

IDOP has decided to revise this process and not require departments to submit HDJs for IDOP's approval. However, each department must maintain records of the reasons that each applicant has been hired for all hires that occur in any EEO-4 category that is underutilized and have preferential hiring goals established. It is believed that this change will make it easier and faster for departments to hire applicants while at the same time it will help departments gather information necessary for implementing nonpreferential actions.

Each department will be required to submit a yearly summary of this information to IDOP as part of the affirmative action planning process each year. Quarterly status reports will also be required with vacancy forecast updates so that assistance in meeting goals can be provided in a timely manner.

It should be noted, however, that IDOP will reserve the right to re-institute a process that calls for submission of individual hiring decision justifications to IDOP before hires are to be made if reviews of reports indicate a need.

Affirmative Action Goals are meant to be Temporary

As mentioned earlier, affirmative action was meant to be a temporary policy aimed at "leveling the workplace playing field". It is important, then, that an endpoint be defined for preferential goals. As mentioned earlier, IDOP has already implemented a policy for goal generation when a department is underutilized which will allow an end date to be set. However, what has not been defined is what happens when balance is achieved in an EEO-4 category. If an EEO-4 category has been shown to be underutilized via the threshold calculation but its yearly one person calculation falls below one due to actions taken by a department, preferential goals are no longer proper. Nonpreferential goals can be continued indefinitely, or at least until the one person calculation equals zero.

X.   Computer Information

The next step in implementing the new affirmative action policy was to translate the decisions that were made by IDOP into a computer program that would yield the data necessary for departments to execute the State's affirmative action policy as it would relate to them. This data would also be important to IDOP in that it would be the foundation for the quarterly and yearly affirmative action reports for the departments, as well as the information used to regulate the departments' progress. The process IDOP went through with regard to programming for the new AAP will not be discussed here.

XI.   Professor Lovell's Recommendations Revisited

As the reader may recall, Lovell was concerned with four main areas of IDOP's current AAP. They were:

- Threshold Calculation Methodology
- Annual Calculation Methodology
- Aggregation of Minorities
- End Date of IDOP's AAP

Professor Lovell was concerned that IDOP's original underutilization calculations, performed in 1986, were more lenient than permitted by either Title VII or the equal protection clause.
Using the "one person" method to calculate both the threshold underutilization in executive branch agencies and their annual underutilization may have generated results showing underutilization which may not have been as substantial as the manifest imbalance standard requires. Lovell, based on this concern, recommended that IDOP recalculate the 1986 threshold underutilization of minorities and females in executive branch departments. The following is an excerpt from Lovell's report:

> "I recommend that the IDOP calculate utilization based on the binomial distribution formula
> or the two-standard deviation model. This can readily be done based on current workforce

numbers and labor force data…it is the calculation of underutilization for 1986 when the State's AAP was commenced that is critical. It should be reconstructed to the extent possible…for those jobs in which there was a manifest imbalance in 1986, affirmative action efforts can continue until balance has been attained—that is, they can continue even though the underutilization is no longer so great that it constitutes a manifest imbalance.

Those job categories in which underutilization in 1986 was two standard deviation or greater were eligible for remedial affirmative action under the most stringent test—the prima facie case test. Because the manifest imbalance standard is more generous, underutilzation that is 1.5 standard deviations and perhaps 1.0 standard deviations may be sufficient, particularly if bolstered by non-statistical evidence suggesting past discrimination."

The recalculation of underutilization in 1986 using the method Lovell prescribed was accomplished. As mentioned earlier, IDOP adopted a one standard deviation as evidence for a manifest imbalance.

Lovell was also concerned that underutilization based on job class and occupational code might be too inflexible, and he recommended that underutilization be based on the overall EEO-4 category. As already discussed, this recommendation was also followed by IDOP. In a sense, it had to be followed due to the large samples required to find underutilzation using the binomial formula. IDOP, although calculating underutilization at the EEO-4 category will require departments to correct at the occupational class level to meet EEO-4 preferential goals. In the future, IDOP may conduct threshold calculations on aggregated departmental and statewide occupational classes, but due to time constraints these calculations were not feasible in the 1998 fiscal year affirmative action planning efforts.

A third concern of Lovell was based on IDOP's practice of aggregating all minorities together when determining underutilization and when making hiring decisions. He recommended that the under-representation calculations be done based on the individual racial and ethnic groupings. IDOP has found, in the course of performing these underutilization calculations, that this was not feasible. In most cases, an aggregated minority group did not meet the Rule of Nines criterion, therefore, it was determined that separating these groups would not yield useful information. In Iowa's case, where minorities made up only 2.6% of the total population when aggregated in 1986 (African Amerians-1.2%, Hispanics-.8%, Asians-.4%, & Native Americans-.2%), non-aggregation of minorities would most likely hide areas of underutilization. In the future, IDOP may conduct another analysis with the minorities in their separate groupings in conjunction with Census 2000 minority group changes.

Professor Lovell's last concern was that in the current Iowa AAP, the State does not seem to declare that preferential affirmative action concludes upon achieving balance within an OCC category. He went on to stress the necessity of an end date for affirmative action goals. IDOP has taken steps to address these concerns. First, IDOP has set the amount of underutilization below which we can no longer be subject to affirmative action goals (less than one person in an EEO-4 category). Second, IDOP will compute realistic but adjustable goals for departments using the "one person" calculation totals, divided by a number determined by individual departments' hiring and turnover trends while taking into account labor force availability percentages. This new policy will allow IDOP to set an end date and regulate departmental progress. Last, IDOP has revised the HDJ process and made departments responsible for tracking their hires within underutilized EEO categories. This change allows departments to review their hiring processes and adjust them as they see necessary to meet affirmative action goals.

XII. Conclusions

As mentioned previously, Lovell's concerns and recommendations, clarity of results and data, along with ease in implementation for state departments were of the highest priority to IDOP when constructing the new AAP. This priority guided IDOP throughout the processes outlined in the previous pages. All of Lovell's recommendations were addressed and every effort was made to increase the conformance between the State's AAP and the current status of existing case law.